Edwards Air Force Base
95th Air Base Wing
Civil Engineer and Transportation Directorate
Environmental Management Division
February 2007
Volume 12 No. 2

Living with Birds

page 4

CSUN Tour provided by Restoration Branch

Page 3

America Recycles Day

Page 6



STAKEHOLDERS

Report to Stakeholders is a publication of the Edwards Air Force Base Environmental Management Division. Its purpose is to inform and educate the public, base workers and residents about continuing Environmental Management efforts on base. It currently has a circulation of 6,000, including about 2,000 subscribers.

Contents of the *Report to Stakeholders* are not necessarily the official view of, or endorsed by, the U.S. government, the Department of Defense or the Department of the Air Force.

All photos are property of the Air Force. Comments or questions should be directed to: Gary Hatch, 95 ABW/PAE, 5 E. Popson Ave., Bldg. 2650A, Edwards AFB, CA 93524-8060, (661) 277-1454.

E-mail: 95ABW.PAE@edwards.af.mil Website:

www.edwards.af.mil/library/environment/index.asp



Commander 95th Air Base Wing Col. H. Brent Baker, Sr.

Base Civil Engineer
James Judkins

Division Chief, Environmental Management *Robert Wood*

Branch Chief, Environmental Restoration *Ai Duong*

Branch Chief, Environmental Conservation Gerald Callahan

Branch Chief, Environmental Quality *Robert Shirley*

Next RAB Meeting

May 17, 2007 5:30 p.m. Boron

Venue is to be determined

The public is invited

If you have a question about the Edwards Air Force Base Environmental Management program, you may address it to Stakeholders Forum, Attn: Gary Hatch or Miriam Horning, 5 E. Popson Ave., Bldg. 2650A Edwards AFB, CA 93524-8060, or send e-mail to: 95ABW.PAE@edwards.af.mil

Environmental Restoration Program

Announcement

There will be a public comment period for the Air Force Research Laboratory Soil and Debris Sites Proposed Plan, scheduled March 8 through April 27. A public availability session is set to be held at Boron, Calif., at either the Senior Center or Boron High School from 5:30 to 7:30 p.m. on a date to be determined in April.

For more information on the public comment period for the AFRL Soil and Debris Sites Proposed Plan or on the public availability session please call Gary Hatch at 277-1454. He can also be reached via e-mail at 95ABW.PAE@edwards.af.mil



ON A TOUR — Science students from California State University, Northridge and a couple of Environmental Restoration Program (ERP) managers visit the SR-71 at the Air Force Flight Test Center Museum. The ERP headed a tour for the students in November 2006.

College students receive an educational tour of Edwards

ydrogeology students from
California State University,
Northridge (CSUN) moved their
studies outside of the classroom and
received real life lessons during a one-day
tour at Edwards Air Force Base (AFB) in
November. Ten students and their professor
spent the day listening to a variety of
briefings on hydrogeology and treating
groundwater contamination. They also
toured Sites 18 and 19 of the Environmental
Restoration Program (ERP), enjoyed lunch
at the Base Exchange and received a lesson
in flight history at the Air Force Flight Test
Center Museum.

"It's a good conclusion to my class," said Ali Tabidian, professor of geology at CSUN. "This reinforces everything I've been teaching."

This was the third time that Tabidian has brought a group of his students to Edwards AFB for an advanced field trip. Those attending were seniors and graduate level students.

"I want them to not only learn about groundwater topics, but also to hear about the various job opportunities here at Edwards, and possibly come work with us," said Rebecca Hobbs, program manager for ERP.

Hobbs, who has been responsible for planning all of the CSUN tours, said the students typically come to the base once a year. "Many of the students have told me this is the highlight of their semester," Hobbs said.

The various briefings were taught by a combination of geologists, hydrogeologists and project engineers. Topics of the day included the geological formations unique to Edwards AFB and the Antelope Valley, an overview of hydrogeology, facts about what hydrogeologists face in the real world, the PHOSter treatability studies at Sites 5 and 14, monitored natural attenuation and the use of membrane-delivered ethene to support cis-DCE degrading bacteria and arsenic treatment.





WHAT'S IN THE BUSHES? — Contract Biologist Wesley King checks for birds nests in bushes located in a demolition area of base housing.

Law protects birds on base

SURVEY Contract **Biologist** Wesley King, top, checks a nest before a house is demolished.



EGGS A bird's nest with eggs in between housing brick, bottom.

The Migratory Bird Treaty Act protects birds, but residents do have options to avoid problems.



Is one of the

Migratory Bird Treaty Act of 1918.

irds frequent hangars, homes, offices and just about any other building on base. And even though they sometimes build nests and lay eggs in places that pose a problem for the people who live and work at Edwards Air Force Base (AFB), most of these birds, their nests and young are protected by federal law.

But that doesn't mean residents and workers have no recourse to stop nesting in areas that create a nuisance.

The key is to act early – meaning before birds get a nest built.

People need to identify areas where birds may nest that would cause a problem and prevent birds from gaining access to place a nest. This is often as simple as pruning vegetation or covering access to a nesting site with a solid surface or wire mesh. Other measures, discussed below, may also be taken.

The Migratory Bird Treaty Act of 1918 protects native birds, their nests, young and eggs from being killed, moved, collected or harmed in any way without permission by the U.S. Fish and Wildlife Service.

"It's important to educate base residents and employees about how to share the environment with birds because Edwards AFB is home to over 200 species of birds, most of which are protected under the MBTA," said biologist Mark Bratton, who works at Environmental Management.

The most common birds seen near base housing and business areas are Brewer's blackbird, the common raven, the house finch, the European house sparrow, the European starling and Say's phoebe. All but the house sparrow and the starling are protected under the MBTA.

Brewer's blackbirds, house finches and Say's phoebes are often found nesting near the housing areas. They like to nest on flat surfaces that are partially to completely secluded and high up, like on the front and back porch eaves of houses. They can also be found nesting on the top of brick walls in holes left uncovered, attic vents, garage rafters, lighting fixtures and many other places in and around base housing.

Ravens often nest near business areas on power poles, large trees and tall structures that offer protection from the elements.

If base residents or businesses do not want birds to nest on or near their property, they can screen attic vents, angle flat surfaces, fill brick holes, make ledges inaccessible and prune vegetation to reduce the amount of suitable nesting habitat.

It is also possible to remove the beginnings of nests as long as there are no eggs or young residing in the nest. Once eggs have been laid in a nest, the nest must be left alone until the nest is clear of eggs and young. The time until the young can fledge depends on



SAY'S PHOEBE — Perches on a cabinet, keeping an eye on its nest.

It's important to educate base residents and employees about how to share the environment with the birds because Edwards AFB is home to over 200 species of birds, most of which are protected under the MBTA.

> Mark Bratton Contract Biologist

the species and can take from a few weeks to a few months. Anyone on base may call Environmental Management for assistance in determining whether the nest is active or not (277-1401).

"The key to discouraging birds from nesting is to be persistent. There have been times when we remove nests that are clear of eggs or young and see the birds taking new nesting materials to a new location," Bratton said. "That is why it is important to take measures that discourage birds from nesting prior to and during the early part of nesting season."

The MBTA states that any acts to kill, collect or harm any birds, their young, eggs or active nests will incur fines or imprisonment and sometimes both. The fines can be up to \$15,000 and imprisonment can be



CORNER — Birds often nest like this in the corners of eaves on houses.

up to two years. The law was passed at a time when bird feathers and nests were collected for sale and use on hats and other artifacts to the extent that some bird populations were declining, some to the point of extinction.

For information about the MBTA and birds on base, call Environmental Management at 277-1401. If a bird is found dead or injured, call Civil Engineering at 277-2431.

A list of the birds protected under the MBTA can be found at http://www.fws.gov/ migratorybirds/intrnltr/mbta/mbtandx.html.

Environmental Management informspublic of America Recycles Day

t all comes back to you," is what America Recycles Day was all about Nov.
15, 2006. The Edwards AFB Environmental Management Division set up a display booth at the Base Exchange (BX) on America Recycles Day to inform those who live and work here about the benefits of recycling.

"The base is doing well with recycling, but there is always room for improvement. We are growing and expanding the recycling program out here," said Gary Shafer, solid waste contractor.

The display booth included types of material that can be recycled: aluminum cans, cardboard, plastic and glass containers. There are also several types of paper that can be recycled including white, colored and newsprint.

The display booth at the BX was manned by Environmental Management (EM) employees for four hours. Shafer and landfill contractor Mike Fiorillo talked with people and explained the recycling program. They also handed out flyers that contained information about what items to recycle and had posters and recycleable material for people to read and touch.

"Recycling is good for the environment," Schafer added. "When people recycle, we keep material out of landfills and return it to the manufacturers to be reused, which will reduce the demand on our natural resources."

There are three parts to the recycling process – collecting, remanufacturing and buying. Each of these three steps is represented by one of the three



SET UP — A booth was set up by the Environmental Management Division at the Base Exchange on Edwards Nov. 15, 2006.

arrows in the recycling logo and each step needs to be present for the recycling process to work.

Each item is remanufactured into a useful product that can be found in the marketplace.

Next on the list for the recycling program workers on base is to prepare for Earth Day and Pollution Prevention Week.

"Environmental Management's goal is to facilitate awareness and educate the public. Recycling is just one part of that process," Schafer said.

America Recycles Day is a national campaign that is held every year. The birth of America Recycles Day took place in 1997 and the goal is to encourage Americans to recycle and purchase recycled products.

In addition to recyclables, hazardous materials also must be diverted from landfills. Hazardous wastes like motor oil, batteries, lead-acid batteries, fluorescent bulbs, used refrigerators, televisions and computer monitors have to be disposed of properly. For more information on how to safely dispose of hazardous materials, residents and workers of Edwards AFB should contact EM at 277-1401, the U-Fix-It Store at 277-2550, the landfill at 277-DUMP or the Auto Hobby Shop at 275-2886.

Recycling Information

Recycling Center Contract Administrator: Milton Riley

Current recyclable materials:

- Scrap metal: segregated by similar type if possible
- · Wire and cable
- Paper: white, colored, computer, shredded, newspaper
- Cardboard: all types
- Toner cartridges: Faxes, copiers, ink-jet printers
- Empty bottles, cans, plastic jugs, jars, etc.
- Magazines and phone books

For questions or concerns contact Milton Riley via phone at (661) 277-2431 or e-mail at milton.riley@edwards.af.mil



TOUR

From page 3

Their tour with ERP program manager Paul Schiff covered the whey powder treatability study at Site 19, the dual-extraction treatment system at Site 18 and a trip to the flightline where students learned firsthand about foreign object damage or FOD. They were surprised by the need to pick rocks from the tires of their tour bus before driving onto the flightline to avoid possible damage to aircraft.

"The most interesting part of the tour was to learn the different methods for remediation of groundwater—aerobic versus anaerobic, proactive versus allow-

ing nature to take care of itself," said Eric Boyer, CSUN graduate student majoring in geology.

Boyer had been to Edwards AFB previously for air shows, but had never seen the sections of the base that he was able to visit during this tour.

"Paleontology is my main area of interest, but environmental geology is a possible career choice as well," Boyer said.

The ten students attending the November tour reside in a variety of areas of Southern California including Kern County, Santa Clarita and the San Fernando Valley.

Kern County resident and CSUN geology major, Shannon Garrison, thought learning about bioremediation, the use

of biological agents, such as bacteria or plants, to remove or neutralize contaminants in soil and water, was the best part of her day at Edwards AFB.

"I had heard about bioremediation before, one of the other students here did a project on it, but it was interesting to see it in action," said Garrison. "It was also great to hear about all of the jobs available."

Garrison added that she is currently working in a geotechnical field, but her career choice could go either way after graduation.

With the success of the past three tours, Professor Tabidian said he plans to continue bringing students to Edwards AFB as long as the opportunity is available to him.

RTS

RAB members get to see what a cleanup program is about

The roar of jet planes greeted Restoration Advisory Board (RAB) members as they began a tour of five cleanup areas on Edwards Air Force Base (AFB) October 11. The tour was given by environmental specialists and program managers, who showed the new members different restoration sites, the equipment being used and the progress of each cleanup site.

"By seeing the area and cleanup equipment firsthand, the public representatives got a better sense of the work the Environmental Restoration Program is doing," said Ai Duong, Restoration Branch Chief.

The tour covered Sites 18, 19, 25, 69 and 285. These sites offered a variety of locales, sites conditions and cleanup methods. Site 285, located on North Base, has a treatability study system designed to remove perchlorate – a chlorinated salt – from groundwater. In the northwestern part of Main Base, Site 25 uses a groundwater extraction and treatment system to



EXPLAINING — From left, Restoration Program Manager Tom Merendini, Main Base Housing Restoration Advisory Board Member Michelle Tucker, Restoration Program Branch Chief Ai Duong and Main Base Test Wing RAB representative Dean Baker at one of the many cleanup sites on base.

clean up trichloroethene or TCE, a solvent once used to clean airplane parts. Near the flightline, jet fuel and TCE contaminate Sites 18 and 19.

Site 18 uses a dual-extraction system to remove contamination from the soil and groundwater at the same time, while Site 19 uses an organic whey powder to break down TCE into harmless byproducts. Site 69 contains buried and surface debris left over from a landfill established in the 1940s.

	Name
New subscription	Name
Change of address	Organ
Cancel subscription	
Mail to:	Addre
95 ABW/PAE RTS Subscription	6.1
5 E. Popson Ave., Bldg. 2650A Edwards AFB, Calif.	City
RAB Men	1bers
BORON Hugh Jamison hbj@ccis.com	(760) 762-6658 Home
CALIFORNIA CITY	
Bob Smith bsmith@ccis.com	(760) 373-4317 Home
LANCASTER Peter Zorba	(661) 723-6234 Work
pzorba@cityoflancaster.org ALTERNATE: Mayor Henry Hearns	(661) 723-6019 Work
hhearns@cityoflancaster.org MOJAVE	
Victor Yaw vyaw@charter.net	(661) 824-2886 Home (661) 275-4296 Work
NORTH EDWARDS	(=) =
Ruby Messersmith messersmith2@verizon.net	(760) 769-4357 Home
ROSAMOND David Newman	(661) 722-6433 Work
dnewman@ispwest.com ALTERNATE: Leslie Uhazy luhazy@avc.edu	(661) 256-8209 Home (661) 722-6417 Work
EDWARDS AFB	(001) 722 0417 WOIK
Housing Michelle Tucker	(661) 258-9030 Home
mztucker@usa.net Main Base Air Base Wing	
Vacant	
Main Base Test Wing Dean Baker	(661) 277-5649 Work
dean.baker.ctr@edwards.af.mil	
NASA Dryden Gemma Fregoso Gemma.V.Fregoso@nasa.gov	(661) 276-2817 Work
ALTERNATE: William Brandweiner William Brandweiner@dfrc.nasa.gov	(661) 276-3339 Work
North Base Vacant	
South Base Vacant	
AF Research Lab/Propulsion Milton McKay	Directorate (661) 275-5191 Work
milton.mckay@edwards.af.mil	(801) 273-3191 WOLK

Report to		
STATE	ME	D)(
		$\square \square \oslash$

EDITOR and WEB DESIGN

WRITING and DESIGN SUPPORT

Heidi Gesiriech Vanessa Green Patti Kumazawa Leilani Richardson Paul Rogers

Name ______ Organization _____ Address _____

. State _____

Where to Find More

INFORMATION

Published data and documents relating to the Environmental Restoration Program are available for public review in information repositories at four locations. The current information repositories are located in the cities of Boron, Lancaster and Rosamond, as well as Edwards AFB. They are updated when new documents are released.

If you have any questions about information in the repositories, please contact Gary Hatch, Environmental Public Affairs at (661) 277-1454 or by e-mail at 95ABW.PAE@edwards.af.mil.

Location	Days	Hours
Edwards AFB Library 5 W. Yeager Blvd. Building 2665 Edwards AFB, Calif. (661) 275-2665	Mon-Thurs Fri Sat & Sun	9:30 a.m 7 p.m. 9:30 a.m 6 p.m. 10:30 a.m 6 p.m.
Kern County Public Library Wanda Kirk Branch 3611 Rosamond Blvd. Rosamond, Calif. (661) 256-3236	Tues & Wed Thurs-Sat	Noon - 8 p.m. 10 a.m 6 p.m.
Los Angeles County Public Library 601 W. Lancaster Blvd. Lancaster, Calif. (661) 948-5029	Mon-Wed Thurs & Fri Sat	10 a.m 8 p.m. 10 a.m 5 p.m. 11 a.m 5 p.m.
Col. Vernon P. Saxon, Jr. Aerospace Museum 26922 Twenty Mule Team Road Boron, Calif. (760) 762-6600	Mon-Sun	10 a.m 4 p.m.



95 ABW/CEVR 5 E. Popson Ave., Bldg. 2650A Edwards AFB, CA 93524-8060 Official Business Standard Rate
U.S. Postage
PAID
Edwards AFB CA
Permit No. 3

ADDRESS SERVICE REQUESTED

